

posterior oculi-motor nucleus. In reference to this relation in man, there are not sufficient anatomical and pathological data to establish it.

The way the upper branch reaches the peripheral facial from the oculi-motor nucleus is through the posterior longitudinal fasciculus and the facial genu. Analagous relations in the division and origin of nerves exist in the spinal cord, and the orbicularis palpebrarum and the levator palpebræ superior are functionally combined. N. E. B.

PHYSIOLOGY OF THE NERVOUS SYSTEM.

ANÆSTHETICS AS A FACTOR IN INSANITY.

Any cause giving rise to delirium may set up a more chronic form of mental disorder quite apart from any febrile disturbance. (*a*) The most common form in such cases is of the type of acute delirious mania; (*b*) though such mental disorder is usually temporary in character, it may pass into chronic weak-mindedness, or into (*c*) progressive dementia which cannot be distinguished from general paresis of the insane.

Alcohol is the most common example of a cause producing permanent disorder of the mind. Symptoms of mental disorder may follow delirium tremens, but instead of the delirious stage disappearing, it becomes established more firmly. A young man of poor nerve inheritance took, within a few days, a large amount of spirit to tide him over some business worry. The symptoms that made the illness appear to be delirium tremens passed off, and left the maniacal excitement persistent. Exhaustion and mental exhaustion followed, with ultimate recovery. Delirium accompanying fevers may have similar results. A seventeen-year-old girl, of neuropathic antecedents, bright, intelligent, and active, became very delirious during the early stages of scarlet fever, and, after several days of sleepless delirium, passed into a condition of mania, at once alarming and revolting. In an asylum she slowly recovered, and has

remained well ever since. Another of similar age and circumstance developed acute delirious mania after measles, and died in a few days. Pneumonia has also given rise to such states. Belladonna has proved efficient in starting the insane process, as when taken by mistake in the form of liniment. A girl of neurotic stock took belladonna liniment instead of cough mixture, and passed through a sharp attack of mania, though the bodily illness was not extreme, and recovery took place. All the usual anæsthetics are known to produce like mental disorders. A young officer in the British army, of uncompromisingly bad heredity—neuropathic, rheumatic, and phthisical—had violent and destructive acute mania after alcoholic excesses. It was difficult to keep him clad, or out of harm's way. An injury to his hand seemed to clear up his wits. Chloroform was given for a better surgical examination, when the old maniacal ideas at once returned, the same delusions and antipathies. He recovered, but with a mental relapse when the hand healed. An elderly patient was operated upon for cancer about the rectum. Upon regaining consciousness, it was apparent that his mind was affected. Admitted shortly after to Bethlem, he had the aspect of a man half-drunk or half-awakened from some anæsthetic. He was restless, incoherent, repeating meaningless expressions, and of very defective memory. Discharged later as a harmless dement, he remained some weeks at home in the same condition, when he suddenly recovered, and performed his clerical duties with all his past zeal and intelligence. A young woman, the mother of a child ten years old, at whose birth transfusion and large quantities of stimulants were necessities, had occasional hysterical attacks, afterwards known to be due to alcohol. She never had delirium tremens, although a chronic drinker. After the administration of nitrous oxide for the purpose of having teeth extracted painlessly, this patient had an attack of delirious mania which settled into dementia, she never after regaining her senses or recognizing her friends, but remains to-day silly and fat. The points in this case are the acquired nervous irritability, the acute delirious mania, with its consecutive

dementia, following in a few hours the use of nitrous oxide. Insanity has followed ovariectomy and parturition when chloroform has been given.

Any toxic agent, more especially those which directly affect the nutrition of the nervous system, as alcohol, lead, belladonna, etc., will cause temporary disorder of intellect in the nervously unstable, and this temporary disorder may assume the form of true insanity; and this insanity generally, though not always, is acute delirious mania. Shock also may produce similar mental disorder, and must be considered as an element in surgical procedures. In the cases recorded, it had the least possible force. Should neurotic inheritance or neurosis in the individual "give us pause" in considering the expediency of operations not essential to life? This is a practical question for the surgeon and the neurologist. George H. Savage, M.D., F.R.S., in the *British Medical Journal*, Dec. 3d, 1887. L. F. B.

A CASE OF LINGUAL MONO-HEMIPLEGIA WITH CORTICAL LOCALIZATION—*Bernheim* (Nancy). French Association for Advancement of Science, sixteenth session, 1887. *Gazette des Hôpitaux*, p. 1,016, 1887.

It is known, through the experiments upon animals by Ferrier, and from clinical observations by Charcot and Pitre, that the lower third of the precentral convolution presides over the movements of the opposite side of the face and tongue, and that destruction of that territory produces facial and lingual hemiplegia. Therefore this center corresponds to the lower facial and hypoglossus. It has however not been possible thus far to dissociate these two centers. In all cases of glossoplegia due to cortical lesion of the precentral convolution, facial paralysis has coexisted. In Bernheim's case we have an isolated lingual hemiplegia. The patient was a girl 23 years of age, affected with multiple sarcomatous tumors, the first of which having been observed in 1886. Suddenly (Jan. 8th, 1887), a decided deviation of the tongue supervened, the tip pointing to the right. She swallowed easily, articulated fairly well, but could not whistle. No other paralysis was present, but the